



NAVAL REGIONAL MEDICAL CENTER
OAKLAND, CALIFORNIA 94627

IN REPLY REFER TO

cc Dr. Lindberg
File SUMEX

7 May 1975

Donald Lindberg, M.D.
605 Lewis Hall
University of Missouri
Columbia, Missouri 65201

Dear Dr. Lindberg:

Thank you for your interest in our project. We feel that the Hypertension Clinic offers a unique opportunity to directly link applied computer technology to primary patient care. The enclosed teletypewriter printouts display the history questionnaire which is answered by the patient via a cathode ray terminal, the physical examination questionnaire which is completed by the physician-assistant or nurse practitioner, and laboratory data entry protocol. The data entered is accumulated and stored in the patient's file and previously entered treatment regimen algorithms are utilized to evaluate the data and outline appropriate treatment regimens.

The hypertension clinic is located in a separate building from the main hospital. A waiting room, main office, nurse practitioner office, five examining rooms, computer room, and staff lounge comprise the physical plant.

At the present time two physician assistants and a nurse practitioner have been trained in the essentials of physical examination. We are currently training two additional physician assistants.

In the two months since the unit has been operational approximately 500 patients have been seen on an "initial visit" basis. We anticipate that when fully staffed a minimum of 1,000 patients can be seen monthly. While each chart is reviewed by one of the three attending physicians, it is apparent that vastly increased numbers of patients can be seen and treated in a highly competent fashion by employing these techniques.

The hypertension clinic was established to achieve two major goals. First, it is our intention to deliver health care in the field of hypertension to the large patient population for which we are responsible. The utilization of paramedical personnel and implementation of computer techniques will assist in this goal by creating a uniformity in treatment, improving patient compliance, and expanding clinical capabilities. A specific example of the achievement of these ends is the "patient record printout" which permits ready and precise access to the patient's history, results of physical examination, laboratory

data, and the prescribed treatment regimen to any physician treating the patient and having his record available.

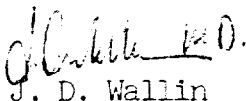
The second major goal is to recall and analyze the data accumulated from various treatment regimens and their effect on the disease process. The computer approach allows us to apply various combinations of treatment regimens to similar groups in a random fashion and evaluate the efficacies and shortcomings of each.

At the present time our computer operations are conducted through the Decision System at Lawrence Hall of Science (LHS), University of California, Berkeley. Several limitations have been imposed upon us by this system. First, we are limited in our transmission and reception rate to 11 characters per second in the LHS system. Second, the system is shared by various educational institutions throughout the Bay Area as well as departments within the University itself. Thus, at peak hours of operation further delays are encountered. Finally, it is conceivable that the LHS will not have sufficient disc space to accommodate the volume of data we will accumulate. It is our desire to employ Sumex as a parallel system thereby increasing the efficiency of the clinic's operation as well as insuring adequate storage space. Our computer consultant, Robert Baer, Ph.D., is confident that he can adapt the present program to the Sumex system in such a fashion. Thus, either system can be used depending upon the needs of the clinic without duplication of services.

I hope this information will be of assistance in your decision on our acceptance into the Sumex project. If any further information is required please feel free to contact me at the Clinical Investigation Center.

With kindest regards.

Yours very truly,



J. D. Wallin
CDR, MC, USN
Director
Clinical Investigation Center

Encl:

(1) Teletype printouts